



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA ST., N.W., SUITE 3100
ATLANTA, GEORGIA 30303

Report No: 50-389/83-44

Licensee: Florida Power and Light Company
9250 West Flagler Street
Miami, FL 33101

Docket No: 50-389

License No: NPF-16

Facility Name: St. Lucie

Inspection at St. Lucie site near Ft. Pierce, Florida

Inspector: *T. E. Conlon* *for* *6-17-83*
J. J. Lenahan Date Signed

Approved by: *T. E. Conlon* *6-17-83*
T. E. Conlon, Section Chief Date Signed
Engineering Programs Branch
Division of Engineering and Operational Programs

SUMMARY

Inspection on May 23 - 25, 1983

Areas Inspected

This routine, unannounced inspection involved 17 inspector-hours on site in the areas of licensee action on previous inspection findings, followup on IE Bulletin 80-11, and a previously identified inspector follow-up item.

Results

Of the three areas inspected, three apparent violations were identified (Inadequate NCR Review Board Corrective Action, paragraph 3.a; Bypassing Inspection Hold Points During Modifications of Masonry Walls, paragraph 6.b; Failure to Verify Corrective Action for Close out of Deficiency Report, paragraph 7). No deviations were identified in the areas inspected.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- **P. P. Carrier, Licensing Engineer
- D. R. Cooper, Supervisory QA Engineer
- **E. W. Dotson, Engineering Project Manager
- *B. J. Escue, Site Manager
- J. Luke, QA Engineer
- *J. L. Parker, Site QC Supervisor
- *E. Preast, Senior Resident Engineer
- *R. A. Symes, Supervisory QA Engineer
- *N. T. Weems, Site QA Supervisor

Other Organizations

- T. Karan, Structural Engineer, EBASCO
- *J. Orlowski, Licensing Engineer, Combustion Engineering
- R. Virgo, QC Supervisor, U. S. Testing

Other contractor employees contacted included four QC inspectors.

NRC Resident Inspector

S. Elrod

*Attended exit interview on May 25, 1983

**Attended management meeting on June 2, 1983

2. Exit Interview

The inspection scope and findings were summarized on May 25, 1983, with those persons indicated in paragraph 1 above. The licensee was informed of the inspection findings listed below. Subsequent to the inspection, Violation Item 389/83-44-01 was discussed in detail with the individuals indicated in paragraph 1 above during a management meeting held in the NRC Region II office on June 2, 1983. The inspection results were also discussed in a telephone conversation with the site manager and site QC supervisor on June 3, 1983. The licensee acknowledged the inspection findings with no dissenting comments.

- Violation Item 389/83-44-01, Inadequate NCR Review Board Corrective Action
- Violation Item 389/83-44-02, Bypassing Inspection Hold Points During Modifications of Masonry Walls

- Violation Item 389/83-44-03, Failure to Verify and Document Corrective Action for Close out of Deficiency Report.

3. Licensee Action on Previous Enforcement Matters

- a. (Open) Violation Item 389/83-06-05, Failure to Follow Procedure for Inspection of Structural Steel. The licensee's corrective actions for this violation are stated in the licensee's March 30, 1983 response to NRC Region II for inspection report number 50-389/83-06. The inspector previously reviewed this item during an inspection conducted on April 25 - 28, 1983 (see inspection report number 50-389/83-36). During the April inspection the licensee was unable to locate selected inspection records requested by the inspector documenting inspections of work covered by drawing number 2998-6-799, Sheets 1 and 2 of 21. In the interim, the licensee located the majority of the records requested by the inspector. These records were reviewed by the inspector and consisted of the following:

- 1) Reports for inspection of bolted connections for beam mark numbers 16D3 and 16D4.
- 2) Reports for inspection of beam mark 13B1R to columns 2 and 3.
- 3) Reports for inspection of bolted connections for beam mark number 13B1R.
- 4) Report for inspection of restraint MS-11 to beam mark numbers 3G1R and 4G1R.
- 5) Reports for visual inspection of field welds on restraint numbers MS-11 and MS-14.
- 6) Reports for visual inspection of restraint numbers RE-MS-1 and RE-MS-4.
- 7) Reports documenting inspection of work required by Field Changes Requests (FCR) numbers 3737, 12253 and 13635.

Review of the inspection reports for RE-MS-1 (report number MH83-0898) and RE-MS-4 (report number MH83-0896) disclosed the following violation: These inspection reports stated that the vendor welds contained numerous defects. The reports were accompanied by sketches which showed the location of the defects. The inspection reports were submitted to the NCR review board for review in accordance with FP&L procedure SQP-21. The review board determined that the restraints were acceptable to "Use-as-is" and that no additional corrective action or engineering review would be required. The inspector noted that the inspection reports indicated that the welds had numerous defects (voids, lack of fusion, underwire, etc.) which would result in the

welds being rejectable. However, the weld defects were not adequately defined in the reports for either engineering or the NCR review board to make a determination as to the acceptability of the welds and conclude that the restraints would perform their intended functions. The basis of the review boards disposition of "Use-as-is" was based on the vendor's weld documentation. The inspector reviewed the vendor weld documentation. The vendor documentation indicated that all welds were acceptable. None of the conditions noted in Inspection Reports MH83-0896 and 0898 had been previously identified and determined to be acceptable by the vendor.

Subsequent to this inspection, the licensee was requested by another NRC Inspector to reinspect the restraints in question. During the reinspection, discrepant conditions were noted which were documented and submitted to engineering for technical evaluation. The failure of the NCR Review Board to act in a prudent manner and request additional inspection and an engineering review to determine if the welding defects identified on inspection report numbers MH83-0896 and MH83-0898 would affect the performance of the restraints was identified to the licensee as Violation Item 389/83-44-01, Inadequate NCR Review Board Corrective Action.

During the inspection, the licensee was still unable to locate inspection records documenting inspection of field change requests (FCR) numbers 3727, 4188, 4338, and 8469. The inspector requested the licensee locate these records for review by the inspector in a future inspection. Violation Item 389/83-06-05 remains open pending review of the records listed above.

- b. (Closed) Violation Item 389/83-16-01, Failure to Execute and Maintain Status of Structural Steel Inspection Program. The licensee's corrective actions for this violation are stated in the licensee's May 9, 1983 response to NRC Region II for inspection report number 50-389/83-16. The inspector reviewed FP&L Memo number PSL2-33-578, dated April 18, 1983. This memo requires that specific process sheet be used to perform any work on structural steel. This is the licensee's corrective action to prevent bypassing of required inspections and maintain status of structural steel inspections. In order to provide verification that the inspection of structural steel was adequate, the licensee developed a civil turnover program which included teams of inspectors to review structural steel inspection records and perform any inspections which had not been previously accomplished. The inspector and other Region II inspectors reviewed the civil turnover program. These reviews are documented in Inspection Report numbers 50-389/83-06, 83-16, 83-26, and 83-31. Numerous violations were identified in the performance of the civil turnover group. However, the licensee's corrective actions to resolve violation 389/83-16-01 are adequate and have been fully implemented. The

problems identified in the performance of the civil turnover group will be examined further when the licensee's corrective actions to resolve the other violations are reviewed by NRC Region II. Violation item 389/83-16-01 is closed.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Review of Licensee's Justification for Resolution of Findings in Audit QAC-PSL2-80-49

In paragraph 4 of the NRC Region II letter to the licensee, Subject: Report No. 50-389/83-16, dated March 25, 1983, NRC Region II requested that the licensee provide justification for resolution of the findings in QA Audit Number QAC-PSL2-80-49 in a manner which was contrary to the licensee's QA program and NRC requirements. This letter also requested that the licensee describe actions planned to improve their management controls to prevent recurrence of a problem of this type. The licensee responded to this letter in their May 9, 1983 response to inspection report 50-389/83-16. The licensee's justification for their resolution was that it was due to an error in judgement. In order to assure that this was an isolated instance, a review of 46 other audits was conducted by an independent Lead Auditor. The auditor documented his review in FP&L memo number QAS-83-069, dated April 20, 1983. The auditor concluded that all other audit resolutions were satisfactory. The inspector reviewed this memo and selectively examined some audits which the auditor reviewed. Based on this review, the inspector concluded that the incorrect resolution of audit number QAC-PSL2-80-49 was an isolated occurrence.

In order to ensure the effectiveness of management systems and the QA program during plant operation, the licensee stated in their May 9, 1983 letter that all management audit reports and responses will be forwarded to the Company Nuclear Review Board for an independent second level review. Licensee audits will be reviewed by NRC under the routine inspection program in subsequent NRC QA inspections. The inspector has no further questions regarding resolution of Audit QAC-PSL2-80-49 at this time.

Within the areas examined, no violations or deviations were identified.

6. (Open) IE Bulletin 80-11, Masonry Wall Design

c Licensee Commitment to Complete IE Bulletin 80-11 Requirements

NRC Region II has previously inspected the licensee's actions to complete IEB 80-11 requirements during inspections which are documented in NRC Inspection Report numbers 50-389/82-01 and 50-389/83-16. During the re-evaluation of the masonry walls required by IEB 80-11, the licensee discovered that the walls had been constructed with less than

the quantity of steel reinforcement required by the design drawings. This problem was identified to NRC as a significant deficiency reportable under 10 CFR 50.55(e). This item, CDR 389/82-024, was reviewed by the inspector during inspections documented in report numbers 50-389/83-06, 50-389/83-16, and 50-389/83-36. This item was closed during the inspection documented in report number 50-389/83-36.

In letter number L-83-319, dated May 24, 1983, the licensee submitted a schedule for completion of IE Bulletin 80-11. The inspector reviewed the schedule and discussed it with licensee management personnel and engineers. Based on the commitments contained in this letter, the licensee has completed to the satisfaction of NRC Region II the requirements of IE Bulletin 80-11. However, IE Bulletin 80-11 will remain open pending completion of the work required by the Bulletin and further review by NRC.

b. Review of Masonry Wall Modification Program

The wall modifications required to resolve CDR 389/82-024, were identified as a result of an initial engineering walkdown conducted during the months of December 1981 to March 1982. Since that time additional walls were constructed, or equipment was installed which changed the classification of some walls from nonseismic to seismic (i.e., safety related equipment had been installed in proximity of walls which had previously been classified as non-seismic. The wall classification was changed to seismic since the wall is required to meet seismic design requirement so safety-related equipment would not be effected in event of an earthquake). These walls were identified during walkdowns conducted in December 1982 and January, 1983. As a result of the design evaluations conducted on the 16 walls identified in December and January walkdowns, 9 walls were identified which required modification. The inspector reviewed Design Change Notice (DCN) numbers DCN-513-2741, DCN-513-2757, and DCN-513-2764. These DCNs were prepared to implement the required modifications which were in progress during the inspection. The inspector examined the work being performed on auxiliary building wall numbers 57, 58, and 158. The inspector discussed the QC inspection requirements and examined QC inspection reports documenting in-process inspection of the wall modifications. These discussions disclosed that inspection hold points had been bypassed and some required inspections had not been performed for modification for wall numbers 57 and 58. The licensee had not identified this problem. Hold points bypassed where those requiring verification of the location of thru bolts, verification that wall reinforcing steel was not damaged during drilling of thru bolt holes, and verification that bolt materials were as specified, including witnessing of transfer of bolt markings cut from stock lengths. The hold points are specified in the Construction Process sheet for thru bolt installation in concrete block walls. This problem was identified to the licensee as Violation Item 389/83-44-02, Bypassing Inspection Hold Points During Modifications of Masonry Walls.

Subsequent to the January 1983, walkdown 20 additional block walls were constructed. Of these walls, 13 are categorized as seismic. Two of the walls, numbers 231 and 232 have been modified. The remaining 11 walls are presently being analyzed by EBASCO engineer. The inspector reviewed DCN-513.2749 which was prepared to implement modification to wall numbers 231 and 232. The inspector examined the modification to the walls which have been completed.

Within the area inspected, no deviations were identified.

7. Previously Identified Inspector Followup Item

(Closed) IFI 389/83-31-01, Correction of Discrepancies Identified During Field Walkdown Inspections

The discrepancies identified during the final walkdown inspection in the reactor containment building were documented on Deficiency Report number DR-889C. The inspector discussed the status of the disposition of DR-889C with licensee and U. S. Testing QC inspectors. The QC inspectors indicated that all items had been completed on the DR except for one which had been submitted to the NCR review board for disposition. The inspectors stated that inspection of these items was documented as QC inspection report (IR) numbers CC 83-2205 through CC 83-2208. The inspector examined these inspection reports and examined various items of hardware in the reactor building which required corrective action to resolve deficiencies noted on the DR. Review of these reports and examination of the hardware disclosed the following problems. (Note: Package numbers are control numbers established by the licensee for inspection purposes and refer to specific areas in the containment building.)

- a. Item 3 of Package 69 addressed discrepancies in connection of a lateral support to a whip restraint adjacent to the pressurizer. These discrepancies had not been resolved.
- b. Items 3 and 5 of Packages 91 and 92 addressed discrepancies in the wire rope supports. These discrepancies had not been resolved.
- c. Areas which were inaccessible during the final walkdown inspection were documented as open items on DR-889c. Disposition of these items required QC to verify that all inspections had been performed in the inaccessible areas by reviewing inspection records. Review of previous inspection reports for inaccessible areas in Packages 18, 19, 27, 28, 62, 63, 64, and 81 had not been accomplished.
- d. Review of previous inspection reports for inaccessible areas on the elevation 62 level in the reactor building was documented on IR number CC 83-2207. This IR stated that all records pertaining to inaccessible areas on the elevation 62 level of the reactor building had not been reviewed but did not list the specific records reviewed or even the specific package number for which this record review was accomplished.

Therefore, this report did not contain the pertinent data and records of action taken pertaining to disposition of the DR as required by paragraph 6.0 of FP&L procedure QP15.1.

The failure of QC to verify corrective action that was completed as required by FP&L procedure QP15.1 for items listed in a through c above and the inadequate records of action taken to disposition item listed in d above was identified to the licensee as Violation Item 389/83-44-03, Failure to Verify and Document Corrective Action for Close out of Deficiency Report. IFI 389/83-31-01 is closed.